

### Notice of Allowability

Application No.

09/316,897

Examiner

MaiKhanh Nguyen

Applicant(s)

RAMAKRISHNA, ANAND

Art Unit

2176

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--**

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to the amendment filed 04/09/2009 and the telephonic interview on 06/16/2009.
2. ☒ The allowed claim(s) is/are 1-8, 10-25, 27-34, 36-39, and 41-47 (now renumbered as Claims 1-43).
3. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☐ All b) ☐ Some\* c) ☐ None of the:  
1. ☐ Certified copies of the priority documents have been received.  
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).  
\* Certified copies not received: \_\_\_\_\_.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.

**THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.**

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
5. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.  
(a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached  
1) ☐ hereto or 2) ☐ to Paper No./Mail Date \_\_\_\_\_.  
(b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date \_\_\_\_\_.  
**Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).**
6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

**Attachment(s)**

1. ☒ Notice of References Cited (PTO-892)
2. ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3. ☐ Information Disclosure Statements (PTO/SB/08),  
Paper No./Mail Date \_\_\_\_\_
4. ☐ Examiner's Comment Regarding Requirement for Deposit of Biological Material
5. ☐ Notice of Informal Patent Application
6. ☒ Interview Summary (PTO-413),  
Paper No./Mail Date 06/16/2009.
7. ☒ Examiner's Amendment/Comment
8. ☒ Examiner's Statement of Reasons for Allowance
9. ☐ Other \_\_\_\_\_.

/Laurie Ries/  
Primary Examiner  
Technology Center 2100  
17 June 2009

**EXAMINER'S AMENDMENT & REASONS FOR ALLOWANCE**

**I. EXAMINER'S AMENDMENT:**

An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the Issue Fee.

Authorization for this examiner's amendment was given in a telephone interview with Mr. Christopher J. Culberson (Reg. No. 59, 136) on 06/16/2009.

**The application has been amended as follows:**

**In the Claims:**

**This listing of claims will replace all prior versions and listings of claims in the application:**

1. (Currently Amended) A computer-readable medium having computer-executable instructions for performing a method of rendering a web page image, the method comprising: [[,]]

receiving an HTML document having an element thereon, the HTML document including information associating the element with an external component that is encapsulated and external to the HTML document such that multiple instances of the external component are used with a plurality of different HTML documents including the HTML document having the element thereon and wherein the information associating the element with the external component is maintained in a cascading style sheet;

rendering a page image corresponding to at least part of the HTML document, the page image including a representation of the element and the page image being rendered by a renderer configured to:

modify the page image by accessing one or more extensible markup language (XML) namespaces specified by the external component to initiate drawing of information on the page image based at least in part on code included in the one or more XML namespaces;

make a plurality of calls to the one or more XML namespaces to initiate the drawing of the information on the page image; and

draw the information on the page image responsive to one or more of the plurality of calls to the one or more XML namespaces;

instantiating the external component to reveal one or more of the  
~~extensible markup language (XML[[D]])~~ namespaces specified by the external  
component, the one or more of the XML namespaces being external to the HTML  
document and specifying one or more behaviors to be applied to the element; and  
accessing the one or more ~~of the~~ XML namespaces to retrieve a new  
behavior to be applied to the representation of the element rendered on the page  
image, the new behavior being configured to enhance a default behavior for the  
element.

2. (Currently Amended) The computer-readable medium of claim 1 further  
comprising, receiving an event, and wherein instantiating the external component in  
response to receiving the event.

3. (Previously Presented) The computer-readable medium of claim 1 further  
comprising, modifying an appearance of the representation of the element in  
response to accessing the one or more of the XML namespaces.

4. (Previously Presented) The computer-readable medium of claim 1 further  
comprising, changing a location of the representation of the element in response to  
accessing the one or more of the XML namespaces.

5. (Previously Presented) The computer-readable medium of claim 1 further comprising, drawing information on the page image in response to accessing the one or more of the XML namespaces.

6. (Original) The computer-readable medium of claim 1 wherein the external component comprises an object, and wherein accessing the external component includes instantiating an instance of the object.

7. (Currently Amended) The computer-readable medium of claim 1 further comprising, receiving a new HTML document having another element thereon, the new HTML document including information associating the other element with the external component, rendering a new page image corresponding to at least part of the HTML document, the new page image including a representation of the other element, and accessing the one or more of the XML namespaces for determining a behavior of the representation of the other element rendered on the new page image.

8. (Previously Presented) The computer-readable medium of claim 7 wherein the external component comprises a component object model (COM) object, and wherein instantiating the external component for determining a behavior of the representation of the other element includes instantiating another instance of the object.

9. (Canceled)

10. (Original) The computer-readable medium of claim 1 wherein the information associating the element with the external component is maintained in a custom tag.

11. (Original) The computer-readable medium of claim 1 wherein the information associating the element with the external component is maintained in a class.

12. (Original) The computer-readable medium of claim 1 wherein the information associating the element with the external component is maintained in the document inline with the element.

13. (Currently Amended) The computer-readable medium of claim 1 wherein the HTML document includes another element having a representation thereof rendered in the page image, the HTML document includes other information associating the other element with the external component, and further comprising, accessing the external component for determining a behavior of the representation of the other element.

14. (Currently Amended) The computer-readable medium of claim 1 wherein the HTML document includes information associating the element with a second

external component, and further comprising, accessing the second external component for determining a second behavior of the representation of the element.

15. (Previously Presented) The computer-readable medium of claim 14 further comprising, resolving a conflict between the behavior determined by the one or more XML namespaces and the second behavior determined by the second external component based on the order in which the behaviors were applied to the element with each subsequent behavior taking precedence over a previous behavior.

16. (Original) The computer-readable medium of claim 1 further comprising, downloading the external component.

17. (Currently Amended) A computer-implemented method of providing dynamic effects to an HTML document, comprising,

encapsulating code in an external component that affects a behavior of one or more elements contained in the HTML document while being external to the HTML document, including elements of different HTML documents, wherein code for determining a behavior of the one more elements contained in the HTML document is not included in the HTML document and is defined by one or more extensible markup language (XML) namespaces associated with the external component;

inserting an element into the HTML document;

attaching a reference in the HTML document to associate the element with an instance of the external component, such that another instance of the element is referenced by a different HTML document, and wherein the reference associating the element with the external component is maintained in a cascading style sheet and comprises a reference to the one or more XML namespaces; [[and]]

providing the HTML document to a renderer, wherein the renderer is capable of instantiating the external component, the renderer being configured to: modify the page image by accessing one or more extensible markup language (XML) namespaces specified by the external component to initiate drawing of information on the page image based at least in part on code included in the one or more XML namespaces;

make a plurality of calls to the one or more XML namespaces to initiate the drawing of the information on the page image;

draw the information on the page image responsive to one or more of the plurality of calls to the one or more XML namespaces;

instantiate the external component to reveal one or more of the XML namespaces specified by the external component, the one or more of the XML namespaces being external to the HTML document and specifying one or more behaviors to be applied to the element; and

access the one or more XML namespaces to retrieve a new behavior to be applied to the representation of the element rendered on the page image, the new behavior being configured to enhance a default behavior for the element.



~~associating an interface of the instance of the external component with the element, accessing the one or more XML namespaces to retrieve the code for determining the behavior of the one more elements contained in the document, and displaying the rendered document.~~

18. (Original) The method of claim 17 further comprising, providing the external component to the renderer.

19. (Currently Amended) The method of claim 17 further comprising, rendering the ~~the~~ [[a]] page image from the HTML document, accessing the one or more XML namespaces, and modifying a representation of the element based on the code in the one or more XML namespaces.

20. (Previously Presented) The method of claim 19 wherein the external component is a component object model (COM) object, and wherein accessing the one or more XML namespaces includes calling an interface of the COM object.

21. (Original) The method of claim 19 wherein modifying a representation of the element includes changing the appearance thereof.

22. (Original) The method of claim 19 wherein modifying a representation of the element includes changing the location thereof.

23. (Currently Amended) The method of claim 17 further comprising, rendering the [[a]] image from the HTML document, accessing the one or more XML namespaces, and drawing information in the image based on the code in the one or more XML namespaces.

24. (Currently Amended) The method of claim 23 wherein rendering the [[a]] page image from the HTML document is interleaved with drawing information in the page image.

25. (Currently Amended) The method of claim 17 further comprising receiving an event indicative of user interaction with the page image.

26. (Canceled)

27. (Previously Presented) The method of claim 17 wherein the reference associating the element with the external component is maintained in a custom tag.

28. (Previously Presented) The method of claim 17 wherein the information associating the element with the external component is maintained in a class identifier.

29. (Currently Amended) The method of claim 17 wherein the reference associating the element with the external component is maintained inline with the element in the HTML document.

30. (Currently Amended) A computer system including at least one processor for rendering page images on a display, comprising:

an external component encapsulating code for modifying a behavior of one or more elements, the external component operable to be instantiated multiple times and operable to modify elements in a plurality of different HTML documents while being external to the HTML documents and wherein the information associating the one or more elements with the external component is maintained in a cascading style sheet, wherein code for determining a behavior of the one or more elements is included in one or more extensible markup language (XML) namespaces that are defined externally to the HTML documents and that are associated with the external component; and

at least one processing unit comprising a renderer connected to the display for rendering the page images, the renderer being configured to:

modify one or more of the page images by accessing one or more of the XML namespaces associated with the external component to initiate drawing of information on the page image based at least in part on code included in the one or more XML namespaces;

make a plurality of calls to the one or more XML namespaces to initiate the drawing of the information on the page image; and

draw the information on the page image responsive to one or more of the plurality of calls to the one or more XML namespaces[.];

receive a document having an element specified therein and information associating the element with the external component, the renderer being further being configured to: instantiate the external component, associate an interface of the instantiated external component with the element, display the document, and access the one or more XML configured to render a page image corresponding to the document, the renderer namespaces to retrieve the code for determining the behavior of the one or more elements for modifying the page image:

the renderer being further configured to:

instantiate the external component to reveal one or more of the XML namespaces specified by the external component, the one or more of the XML namespaces being external to the HTML document and specifying one or more behaviors to be applied to the element; and

access the one or more XML namespaces to retrieve a new behavior to be applied to the representation of the element rendered on the page image, the new behavior being configured to enhance a default behavior for the element.

31. (Original) The system of claim 30 further comprising a mechanism for receiving an event.

32. (Previously Presented) The system of claim 30 wherein the renderer is configured to display a representation of the element and modify a behavior of the element by accessing the one or more XML namespaces.
33. (Original) The system of claim 32 wherein the behavior is modified by changing a displayed property of the representation of the element.
34. (Original) The system of claim 32 wherein the behavior is modified by changing a displayed location of the representation of the element.
35. (Cancelled)
36. (Currently Amended) The system of claim 30 ~~[[35]]~~ wherein the renderer is configured to call the external component a plurality of times to draw information on the page image, and the renderer is configured to draw information on the page image between at least some of calls to the external component.
37. (Previously Presented) The system of claim 30 wherein the external component comprises an object, and wherein the renderer is configured to instantiate an instance of the object.

38. (Previously Presented) The system of claim 30 wherein the external component comprises an object, and wherein the renderer is configured to communicate with the object through an interface.

39. (Currently Amended) The system of claim 30 wherein the renderer is configured to receive a new HTML document having another element thereon that references the external component.

40. (Canceled)

41. (Currently Amended) The system of claim 30 wherein the cascading style sheet is embedded in the HTML document.

42. (Currently Amended) The system of claim 30 wherein the cascading style sheet is linked to the HTML document.

43. (Original) The system of claim 30 including a custom tag for associating the element with the external component.

44. (Currently Amended) The system of claim 30 wherein the information associating the element with the external component is maintained in the HTML document inline with the element.

45. (Currently Amended) The system of claim 30 wherein the HTML document includes another element and information associating the other element with the external component, and wherein the renderer is configured to access the one or more XML namespaces for determining a behavior of the representation of the other element.

46. (Currently Amended) The system of claim 30 wherein the HTML document includes information associating the element with a second external component.

47. (Previously Presented) The system of claim 30 wherein the renderer is configured to access the external component to control the format of data input by a user.

## **II. REASONS FOR ALLOWANCE:**

Claims 1-8, 10-25, 27-34, 36-39, and 41-47 are allowed.

The following is an examiner's statement of reasons for allowance:

The prior art does not expressly teach or render obvious the invention as recited in independent Claims 1, 17, and 30.

The features as recited in independent Claims 1, 17, and 30 “*rendering a page image corresponding to at least part of the HTML document, the page image including a representation of the element and the page image being rendered by a renderer configured to: modify the page image by accessing one or more extensible markup language (XML) namespaces specified by the external component to initiate drawing of information on the page image based at least in part on code included in the one or more XML namespaces; make a plurality of calls to the one or more XML namespaces to initiate the drawing of the information on the page image; and draw the information on the page image responsive to one or more of the plurality of calls to the one or more XML namespaces; instantiating the external component to reveal one or more of the XML namespaces specified by the external component, the one or more of the XML namespaces being external to the HTML document and specifying one or more behaviors to be applied to the element; and accessing the one or more XML namespaces to retrieve a new behavior to be applied to the representation of the element rendered on the page image, the new behavior being configured to enhance a default behavior for the element*”, when taken in the context of the Claims as a whole, were not uncovered in the prior art teachings.

Dependent Claims are allowed as they depend upon allowable independent claims.



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Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the Issue Fee. Such submissions should be clearly labeled “Comments on Statement of Reasons for Allowance.”

### **Contact information**

- III. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Maikhanh Nguyen whose telephone number is (571) 272-4093. The examiner can normally be reached on Monday - Friday from 9:00am – 30 pm. If attempts to reach the examiner by telephone are unsuccessful, the examiner’s supervisor, Doug Hutton can be reached at (571) 272-4137.

The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/MaiKhanh Nguyen/

Examiner, Art Unit 2176

/Laurie Ries/  
Primary Examiner  
Technology Center 2100  
17 June 2009